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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,234	05/08/2001	Harvey R. Bialk	2001-0147	4000

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EXAMINER	
PHAN, TAM T	

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,234	BIALK ET AL.	
	Examiner	Art Unit	
	Tam (Jenny) Phan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/2/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been examined. Claims 1-30 are presented for examination.

Priority

2. No priority claims have been made.

3. The effective filing date for the subject matter defined in the pending claims in this application is 05/08/2001.

Information Disclosure Statement

4. An initialed and dated copy of Applicant's IDS form 1449, Received on 08/02/2001 (02 August 2001), is attached to the instant Office action.

Specification

5. The disclosure is objected to because of the following informalities: Serial numbers of co-pending applications (09/851235, 09/851285, and 09/850910) should be listed.

Appropriate correction is required.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In*

re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 8-12 of copending Application No. 09/850,910. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the two pending applications are minor wording, which do not change the scope of the invention. Refer to the below observation for obvious variations of limitation in claims 1, 2, 4, 15, and 28 of the instant application and claims 1-3, 15, and 22 of the pending application.

8. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Instant 09/851,234	Pending Application 09/850,910
1. A broadband network comprising: a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a subscriber;	1. A broadband network comprising: a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a subscriber;
and an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the	and a fault manager having an alarm visualization tool for generating visual displays of the status and configuration of the network elements and the customer-premises equipment.

configuration of the network elements and the customer-premises equipment. 2. The broadband network of claim 1 further comprising: a database operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, and for storing data indicative of assigned capacity of the network elements. 4. The broadband network of claim 2 further comprising: a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscriber.	2. The broadband network of claim 1 further comprising: an HFC network manager for monitoring status and configuration of the network elements and the customer-premises equipment, wherein the fault manager is operable with the HFC network manager for generating the visual displays. 3. The broadband network of claim 2 further comprising: a service, design, and inventory (SDI) database operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, wherein the fault manager is operable with the HFC network manager and the SDI database for generating the visual displays.
15. In a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for communicating telephony, data, and video signals with customer-premises equipment, a network management system for managing the HFC network, the HFC network management system comprising: an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment.	15. A fault manager for a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a subscriber, the fault manager comprising: an alarm visualization tool operable for monitoring status and configuration of the network elements and the customer-premises equipment and for generating visual displays of the status and configuration of the network elements and the customer-premises equipment.
28. In a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for communicating telephony, data, and video	22. In a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for

signals with customer-premises equipment of a subscriber, a network management method for managing the HFC network, the HFC network management method comprising:	communicating telephony, data, and video signals with customer-premises equipment of a subscriber, a network management method for managing the broadband network, the network management method comprising:
monitoring status of the network elements and the customer-premises equipment; monitoring the configuration of the network elements and the customer-premises equipment;	monitoring status of the network elements and the customer-premises equipment; monitoring the configuration of the network elements and the customer-premises equipment;
storing data indicative of the configuration of the network elements and the customer-premises equipment;	storing data indicative of the configuration of the network elements and the customer-premises equipment;
storing data indicative of assigned capacity of the network elements; provisioning network elements with the customer-premises equipment of the subscriber by controlling the configuration of the network elements and the customer-premises equipment based on the data indicative of the assigned capacity of the network elements in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of a subscriber;	
and generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscriber based on the monitored status of the network elements and the customer-premises equipment and the data indicative of the configuration of the network elements and the customer-premises equipment.	and generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscriber based on the monitored status of the network elements and the customer-premises equipment and the data indicative of the configuration of the network elements and the customer-premises equipment.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

10. Claims 1, 9-10, 15, and 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Dziekan et al. (U.S. Patent Number 6,711,135), hereinafter referred to as Dziekan.

11. Regarding claim 1, Dziekan disclosed a broadband network comprising: a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a subscriber; and an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment (Title, Abstract, Figures 1, column 2 lines 40-58, column 4 lines 34-56).

12. Regarding claim 9, Dziekan disclosed a broadband network wherein the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals (Figures 1-2, 4-5, 6B and associated text, column 6 lines 25-47, column 8 lines 49-65).

13. Regarding claim 10, Dziekan disclosed a broadband network wherein the network elements further include a fiber optics node connected at one end to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at the other end to the customer-premises equipment by coax (Figures 1-2, 4-5, 6B and associated text, column 6 lines 25-47, column 8 lines 49-65).

14. Regarding claim 12, Dziekan disclosed a broadband network wherein the HFC network manager uses a rules-based system for monitoring the status and configuration of the network elements and the customer-premises equipment (Figure 1, column 4 lines 34-56, column 4 line 57-column 5 lines 3, column 5 lines 46-67).

15. Regarding claim 15 and 23-24, the network management system for managing the HFC network corresponds directly to the method of claims 1 and 9-10, and thus these claims are rejected using the same rationale.

16. Since all the limitations of the claimed invention were disclosed by Dziekan, claims 1, 9-10, 15, and 23-24 are rejected.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 2-4, 11, 13-14, 16-18, 25-27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dziekan et al. (U.S. Patent Number 6,711,135), hereinafter

referred to as Dziekan, in view of Dev et al. (U.S. Patent Number 5,559,955), hereinafter referred to as Dev.

19. Regarding claim 2, Dziekan disclosed a broadband network comprising: a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a subscriber; and an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment (Title, Abstract, Figures 1, column 2 lines 40-58, column 4 lines 34-56).

20. Dziekan taught the invention substantially as claimed. However, Dziekan did not expressly teach a database operable with the HFC network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, and for storing data indicative of assigned capacity of the network elements.

21. Dziekan suggested exploration of art and/or provided a reason to modify the method of Dziekan with the database feature (column 4 lines 29-33).

22. Dev disclosed a network comprising a database operable with the network manager for storing data indicative of the configuration of the network elements and the customer-premises equipment, and for storing data indicative of assigned capacity of the network elements (Figures 1, column 5 lines 12-44).

23. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Dziekan with the teachings of Dev to

include a database in order to store the monitoring and managing data (column 7 lines 60-62) which would allow these information to be available to other resources for use for visual displays, graphical interpretation, etc (Dev, Figure 9).

24. Regarding claim 3, Dziekan and Dev combined disclose a broadband network comprising: an online provisioning application link (OPAL) operable with the HFC network manager and the database for provisioning network elements with the customer-premises equipment of the subscriber based on the assigned capacity of the network elements in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the subscriber (Dziekan, column 4 lines 11-33, column 5 lines 6-15; Dev, Figure 1, column 5 lines 12-46).

25. Regarding claim 4, Dev disclosed a broadband network further comprising: a fault manager having an alarm visualization tool operable with the HFC network manager and the database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscriber (Figures 1 and 9, column 14 lines 49-61).

26. Regarding claim 11, Dziekan disclosed a broadband network further comprising: an order manager operable with the OPAL for monitoring the provisioning of HFC network elements with customer-premises equipment by OPAL (column 4 lines 11-33, column 5 lines 6-15).

27. Regarding claim 13, Dev disclosed a broadband network wherein the database is a service, design, and inventory (SDI) database and further stores data indicative of

physical and logical connections between the HFC network and the customer-premises equipment of subscribers (Figure 1, column 5 lines 12-46).

28. Regarding claim 14, Dziekan disclosed a broadband network wherein the OPAL provisions the network elements with customer-premises equipment such that the network elements and the customer-premises equipment are logically connected (Figures 1-2, column 4 lines 11-33, column 10 lines 19-36).

29. Regarding claims 16-18 and 25-27, the network management system for managing the HFC network corresponds directly to the method of claims 2-4, 11, and 13-14, and thus these claims are rejected using the same rationale.

30. Regarding claim 28, Dziekan and Dev combined disclose a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a subscriber, a network management method for managing the HFC network, the HFC network management method comprising: monitoring status of the network elements and the customer-premises equipment; monitoring the configuration of the network elements and the customer-premises equipment; storing data indicative of the configuration of the network elements and the customer-premises equipment; storing data indicative of assigned capacity of the network elements; provisioning network elements with the customer-premises equipment of the subscriber by controlling the configuration of the network elements and the customer-premises equipment based on the data indicative of the assigned capacity of the network elements in order to enable communication of telephony, data, and video signals between the HFC network and the

customer-premises equipment of a subscriber; and generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscriber based on the monitored status of the network elements and the customer-premises equipment and the data indicative of the configuration of the network elements and the customer-premises equipment (Dziekan, Title, Abstract, Figures 1, column 2 lines 40-58, column 4 lines 34-56; Dev, Figures 1, column 3 line 62-column 4 line 28, column 5 lines 12-44).

31. Since all the limitations of the claimed invention were disclosed by the combination of Dziekan and Dev, claims 2-4, 11, 13-14, 16-18, 25-27, and 28 are rejected.

32. Claims 5-8, 19-22, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dziekan et al. (U.S. Patent Number 6,711,135), hereinafter referred to as Dziekan, in view of Dev et al. (U.S. Patent Number 5,559,955), hereinafter referred to as Dev, and further in view of Daniel, III et al. (U.S. Patent Number 4,972,453), hereinafter referred to as Daniel.

33. Regarding claims 5, the combination of Dziekan and Dev disclosed an HFC management network and the limitations of method 1-4 as applied above. However, the combination of Dziekan and Dev did not expressly teach a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

34. Dev suggested exploration of art and/or provided a reason to modify the combined method of Dziekan and Dev with the trouble ticket alerts (Figure 10).

35. Daniel disclosed a network having a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment (Abstract, column 2 lines 18-39, column 3 lines 23-39, column 5 lines 9-15).

36. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the combined method of Dziekan and Dev with the teachings of Daniel to include a trouble ticket system operable with at least of the HFC network manager and the fault manager for generating trouble alerts in response to improper status or configuration of at least one of the network elements and the customer-premises equipment as disclosed by Daniel in order to generate a fault report to alerts network managers (Daniel, column 2 lines 18-39).

37. Regarding claim 6, Daniel disclosed network wherein the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed (column 3 lines 40-66, column 16 lines 37-58).

38. Regarding claim 7, Daniel disclosed network further comprising a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one

of the network elements and the customer-premises equipment (column 2 lines 18-39, column 3 lines 23-39, column 5 lines 9-15).

39. Regarding claim 8, Daniel disclosed network wherein the HFC network manager updates the improper configuration of the at least one of the network elements and the customer-premises equipment to a proper configuration after the trouble ticket alert has been addressed (column 3 lines 40-66, column 16 lines 37-58).

40. Regarding claims 19-22, the network management system for managing the HFC network corresponds directly to the method of claims 5-8, and thus these claims are rejected using the same rationale.

41. Regarding claims 29-30, the limitations of the network management system for managing the HFC network are similar to the limitations of claims 5 and 7, and thus these claims are rejected using the same rationale.

42. Since all the limitations of the claimed invention were disclosed by the combination of Dziekan, Dev, and Daniel, claims 5-8, 9-22, and 29-30 are rejected.

Conclusion

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (703) 305-4665 or (571) 272-3930 (new telephone number after October 2004). The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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September 13, 2004